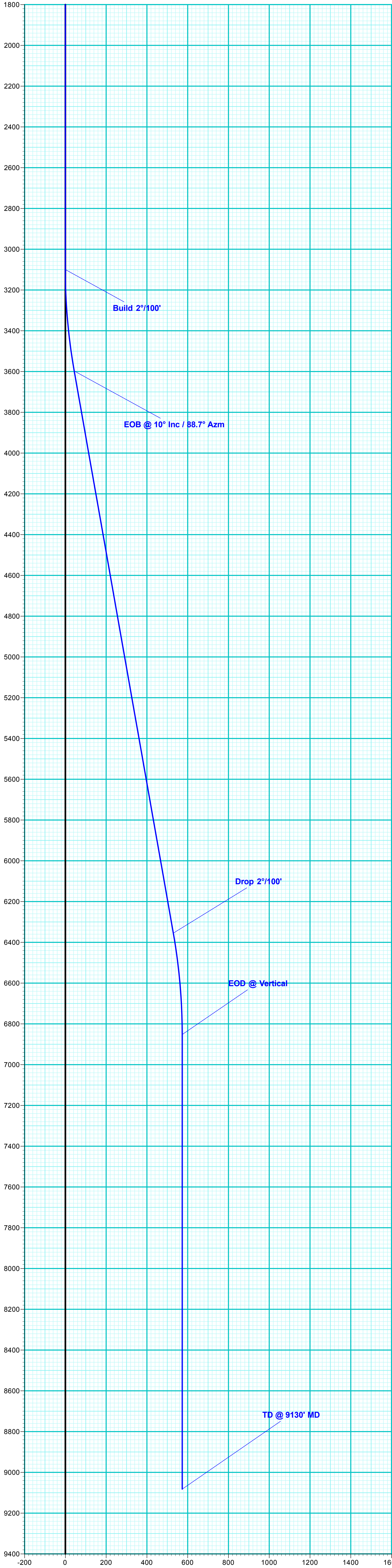
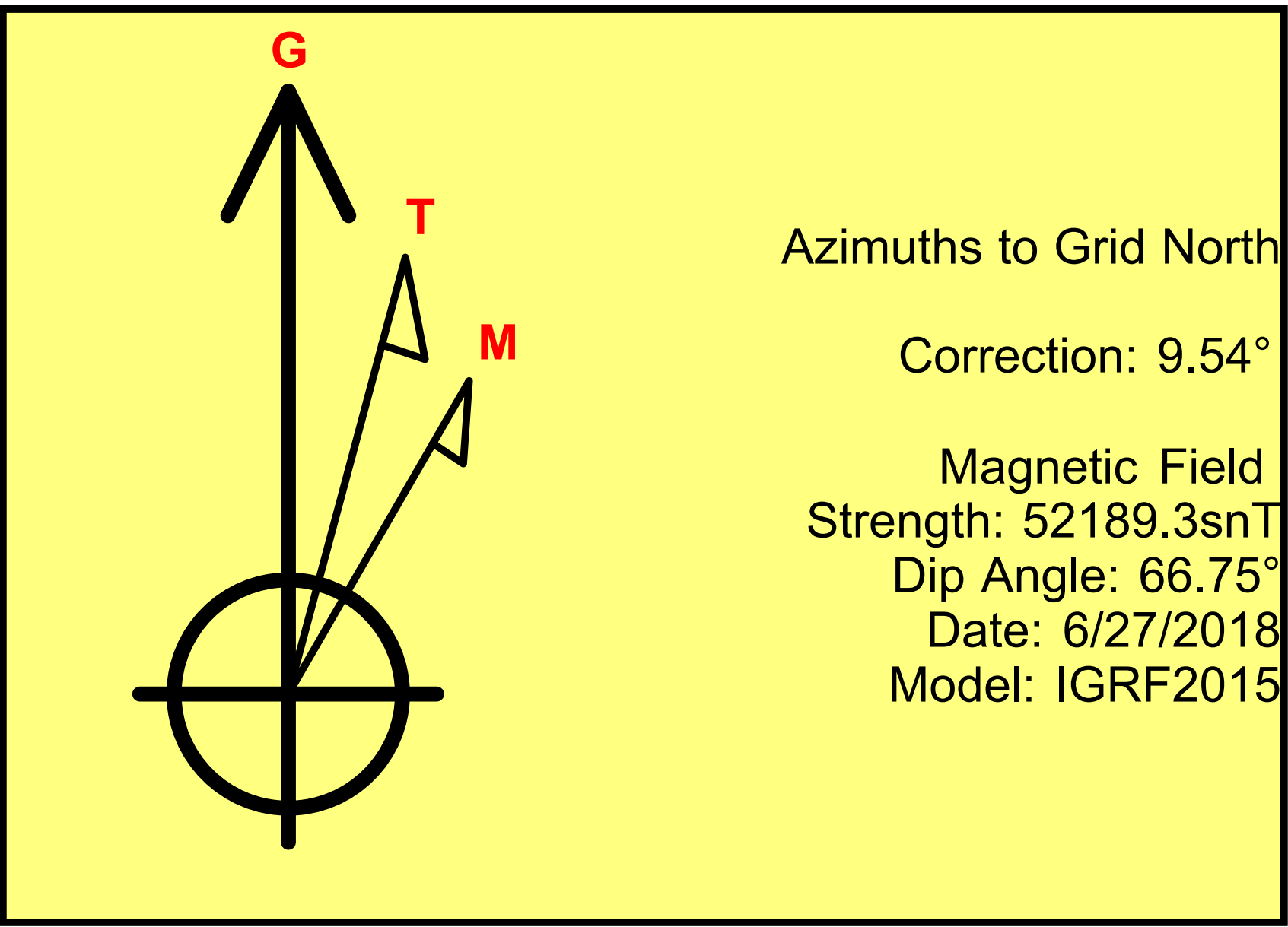


Company Name: SandRidge Energy
PRU 0880 6-29
Jackson County, Colorado
Rig:
Created By: Shane Robbins
Date: 6/28/2018

PRU 0880 6-29
Jackson County, Colorado
Q180*** & RM-180***
Design #1

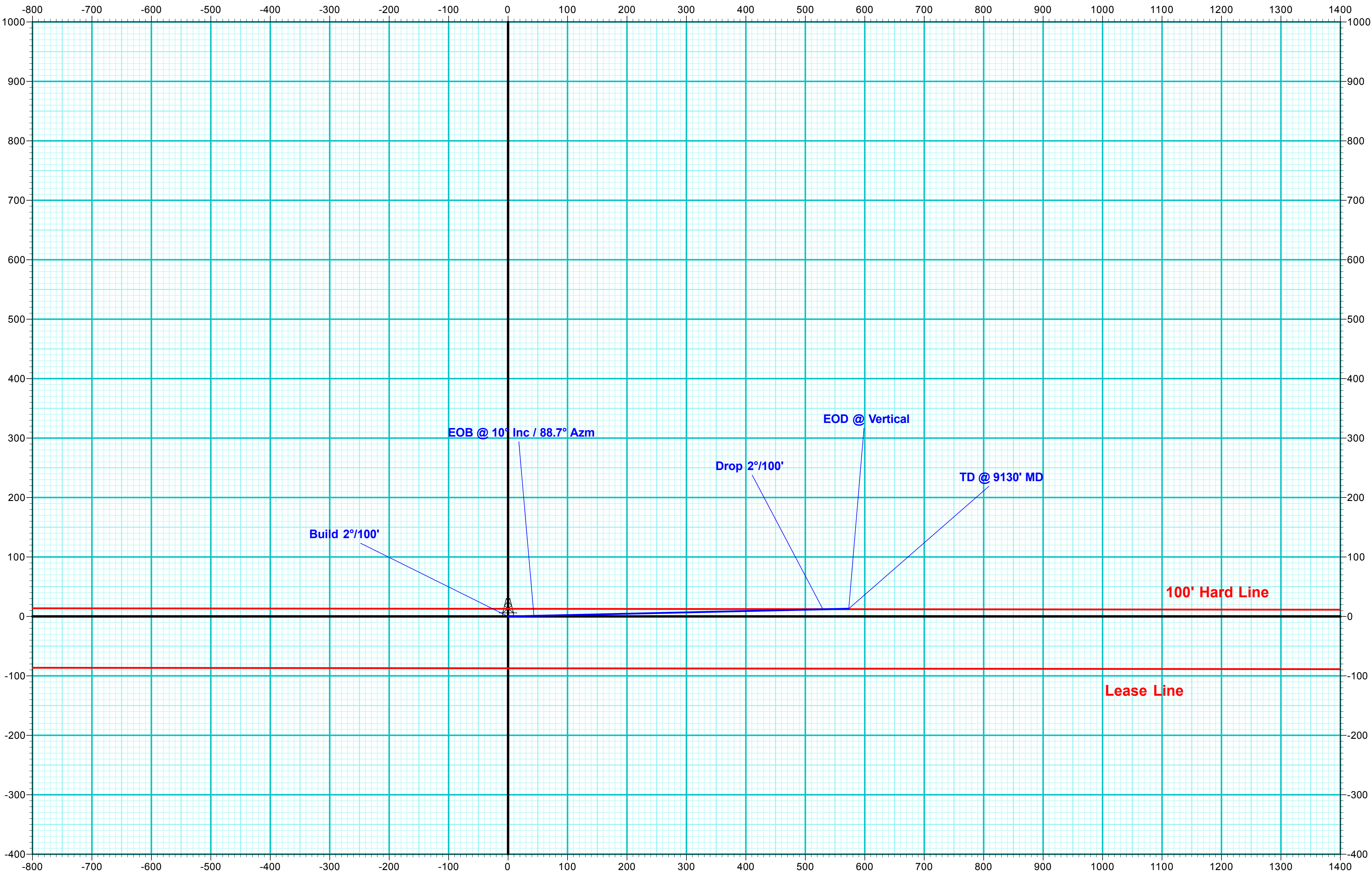
SandRidge Energy



WELL DETAILS: PRU 0880 6-29						
8084.3						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	1473562.81	2751473.40	40° 37' 47.575 N	106° 23' 43.418 W	

PROJECT DETAILS: Jackson County, Colorado	
Geodetic System: US State Plane 1983	
Datum: North American Datum 1983	
Ellipsoid: GRS 1980	
Zone: Colorado Northern Zone	
System Datum: Mean Sea Level	

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3100.0	0.00	0.00	3100.0	0.0	0.0	0.00	0.00	0.0	
3	3600.0	10.00	88.70	3597.5	1.0	43.5	2.00	88.70	43.5	Build 2°/100'
4	6400.0	10.00	88.70	6354.9	12.0	529.6	0.00	0.00	529.7	EOB @ 10° Inc / 88.7° Azm
5	6900.0	0.00	0.00	6852.4	13.0	573.1	2.00	180.00	573.3	Drop 2°/100'
6	9130.0	0.00	0.00	9082.4	13.0	573.1	0.00	0.00	573.3	EOD @ Vertical
										TD @ 9130' MD



Vertical Section at 88.70° (200 usf/in)

SandRidge Energy

**Jackson County, Colorado
Sec 29, T8N, R80W, 6th PM
PRU 0880 6-29**

Wellbore #1

Plan: Design #1

QES Well Planning Report

28 June, 2018



Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well PRU 0880 6-29
Company:	SandRidge Energy	TVD Reference:	WELL @ 8109.3usft
Project:	Jackson County, Colorado	MD Reference:	WELL @ 8109.3usft
Site:	Sec 29, T8N, R80W, 6th PM	North Reference:	Grid
Well:	PRU 0880 6-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Jackson County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Sec 29, T8N, R80W, 6th PM		
Site Position:		Northing:	1,473,562.81 usft
From:	Map	Easting:	2,751,473.40 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	40° 37' 47.575 N
		Longitude:	106° 23' 43.418 W
		Grid Convergence:	-0.58 °

Well	PRU 0880 6-29		
Well Position	+N/-S	0.0 usft	Northing: 1,473,562.81 usft
	+E/-W	0.0 usft	Easting: 2,751,473.40 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 40° 37' 47.575 N
			Longitude: 106° 23' 43.418 W
			Ground Level: 8,084.3 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	6/27/2018	8.96	66.75	52,189.33749219

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	88.70

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,600.0	10.00	88.70	3,597.5	1.0	43.5	2.00	2.00	0.00	88.70	
6,400.0	10.00	88.70	6,354.9	12.0	529.6	0.00	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,852.4	13.0	573.1	2.00	-2.00	0.00	180.00	
9,130.0	0.00	0.00	9,082.4	13.0	573.1	0.00	0.00	0.00	0.00	

Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well PRU 0880 6-29
Company:	SandRidge Energy	TVD Reference:	WELL @ 8109.3usft
Project:	Jackson County, Colorado	MD Reference:	WELL @ 8109.3usft
Site:	Sec 29, T8N, R80W, 6th PM	North Reference:	Grid
Well:	PRU 0880 6-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 2°/100'									
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	2.00	88.70	3,200.0	0.0	1.7	1.7	2.00	2.00	0.00
3,300.0	4.00	88.70	3,299.8	0.2	7.0	7.0	2.00	2.00	0.00
3,400.0	6.00	88.70	3,399.5	0.4	15.7	15.7	2.00	2.00	0.00
3,500.0	8.00	88.70	3,498.7	0.6	27.9	27.9	2.00	2.00	0.00
EOB @ 10° Inc / 88.7° Azm									
3,600.0	10.00	88.70	3,597.5	1.0	43.5	43.5	2.00	2.00	0.00
3,700.0	10.00	88.70	3,695.9	1.4	60.9	60.9	0.00	0.00	0.00
3,800.0	10.00	88.70	3,794.4	1.8	78.2	78.3	0.00	0.00	0.00
3,900.0	10.00	88.70	3,892.9	2.2	95.6	95.6	0.00	0.00	0.00
4,000.0	10.00	88.70	3,991.4	2.6	113.0	113.0	0.00	0.00	0.00
4,100.0	10.00	88.70	4,089.9	3.0	130.3	130.3	0.00	0.00	0.00
4,200.0	10.00	88.70	4,188.3	3.4	147.7	147.7	0.00	0.00	0.00
4,300.0	10.00	88.70	4,286.8	3.7	165.0	165.1	0.00	0.00	0.00
4,400.0	10.00	88.70	4,385.3	4.1	182.4	182.4	0.00	0.00	0.00
4,500.0	10.00	88.70	4,483.8	4.5	199.8	199.8	0.00	0.00	0.00
4,600.0	10.00	88.70	4,582.3	4.9	217.1	217.2	0.00	0.00	0.00
4,700.0	10.00	88.70	4,680.8	5.3	234.5	234.5	0.00	0.00	0.00
4,800.0	10.00	88.70	4,779.2	5.7	251.8	251.9	0.00	0.00	0.00
4,900.0	10.00	88.70	4,877.7	6.1	269.2	269.3	0.00	0.00	0.00
5,000.0	10.00	88.70	4,976.2	6.5	286.6	286.6	0.00	0.00	0.00
5,100.0	10.00	88.70	5,074.7	6.9	303.9	304.0	0.00	0.00	0.00

Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well PRU 0880 6-29
Company:	SandRidge Energy	TVD Reference:	WELL @ 8109.3usft
Project:	Jackson County, Colorado	MD Reference:	WELL @ 8109.3usft
Site:	Sec 29, T8N, R80W, 6th PM	North Reference:	Grid
Well:	PRU 0880 6-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,200.0	10.00	88.70	5,173.2	7.3	321.3	321.4	0.00	0.00	0.00
5,300.0	10.00	88.70	5,271.6	7.7	338.6	338.7	0.00	0.00	0.00
5,400.0	10.00	88.70	5,370.1	8.1	356.0	356.1	0.00	0.00	0.00
5,500.0	10.00	88.70	5,468.6	8.5	373.4	373.5	0.00	0.00	0.00
5,600.0	10.00	88.70	5,567.1	8.9	390.7	390.8	0.00	0.00	0.00
5,700.0	10.00	88.70	5,665.6	9.3	408.1	408.2	0.00	0.00	0.00
5,800.0	10.00	88.70	5,764.0	9.7	425.4	425.5	0.00	0.00	0.00
5,900.0	10.00	88.70	5,862.5	10.0	442.8	442.9	0.00	0.00	0.00
6,000.0	10.00	88.70	5,961.0	10.4	460.2	460.3	0.00	0.00	0.00
6,100.0	10.00	88.70	6,059.5	10.8	477.5	477.6	0.00	0.00	0.00
6,200.0	10.00	88.70	6,158.0	11.2	494.9	495.0	0.00	0.00	0.00
6,300.0	10.00	88.70	6,256.4	11.6	512.2	512.4	0.00	0.00	0.00
Drop 2°/100'									
6,400.0	10.00	88.70	6,354.9	12.0	529.6	529.7	0.00	0.00	0.00
6,500.0	8.00	88.70	6,453.7	12.4	545.2	545.4	2.00	-2.00	0.00
6,600.0	6.00	88.70	6,552.9	12.6	557.4	557.6	2.00	-2.00	0.00
6,700.0	4.00	88.70	6,652.6	12.8	566.1	566.3	2.00	-2.00	0.00
6,800.0	2.00	88.70	6,752.4	13.0	571.4	571.5	2.00	-2.00	0.00
EOD @ Vertical									
6,900.0	0.00	0.00	6,852.4	13.0	573.1	573.3	2.00	-2.00	-88.70
7,000.0	0.00	0.00	6,952.4	13.0	573.1	573.3	0.00	0.00	0.00
7,100.0	0.00	0.00	7,052.4	13.0	573.1	573.3	0.00	0.00	0.00
7,200.0	0.00	0.00	7,152.4	13.0	573.1	573.3	0.00	0.00	0.00
7,300.0	0.00	0.00	7,252.4	13.0	573.1	573.3	0.00	0.00	0.00
7,400.0	0.00	0.00	7,352.4	13.0	573.1	573.3	0.00	0.00	0.00
7,500.0	0.00	0.00	7,452.4	13.0	573.1	573.3	0.00	0.00	0.00
7,600.0	0.00	0.00	7,552.4	13.0	573.1	573.3	0.00	0.00	0.00
7,700.0	0.00	0.00	7,652.4	13.0	573.1	573.3	0.00	0.00	0.00
7,800.0	0.00	0.00	7,752.4	13.0	573.1	573.3	0.00	0.00	0.00
7,900.0	0.00	0.00	7,852.4	13.0	573.1	573.3	0.00	0.00	0.00
8,000.0	0.00	0.00	7,952.4	13.0	573.1	573.3	0.00	0.00	0.00
8,100.0	0.00	0.00	8,052.4	13.0	573.1	573.3	0.00	0.00	0.00
8,200.0	0.00	0.00	8,152.4	13.0	573.1	573.3	0.00	0.00	0.00
8,300.0	0.00	0.00	8,252.4	13.0	573.1	573.3	0.00	0.00	0.00
8,400.0	0.00	0.00	8,352.4	13.0	573.1	573.3	0.00	0.00	0.00
8,500.0	0.00	0.00	8,452.4	13.0	573.1	573.3	0.00	0.00	0.00
8,600.0	0.00	0.00	8,552.4	13.0	573.1	573.3	0.00	0.00	0.00
8,700.0	0.00	0.00	8,652.4	13.0	573.1	573.3	0.00	0.00	0.00
8,800.0	0.00	0.00	8,752.4	13.0	573.1	573.3	0.00	0.00	0.00
8,900.0	0.00	0.00	8,852.4	13.0	573.1	573.3	0.00	0.00	0.00
9,000.0	0.00	0.00	8,952.4	13.0	573.1	573.3	0.00	0.00	0.00
9,100.0	0.00	0.00	9,052.4	13.0	573.1	573.3	0.00	0.00	0.00
TD @ 9130' MD									
9,130.0	0.00	0.00	9,082.4	13.0	573.1	573.3	0.00	0.00	0.00

Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well PRU 0880 6-29
Company:	SandRidge Energy	TVD Reference:	WELL @ 8109.3usft
Project:	Jackson County, Colorado	MD Reference:	WELL @ 8109.3usft
Site:	Sec 29, T8N, R80W, 6th PM	North Reference:	Grid
Well:	PRU 0880 6-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,100.0	3,100.0	0.0	0.0	Build 2°/100'
3,600.0	3,597.5	1.0	43.5	EOB @ 10° Inc / 88.7° Azm
6,400.0	6,354.9	12.0	529.6	Drop 2°/100'
6,900.0	6,852.4	13.0	573.1	EOD @ Vertical
9,130.0	9,082.4	13.0	573.1	TD @ 9130' MD